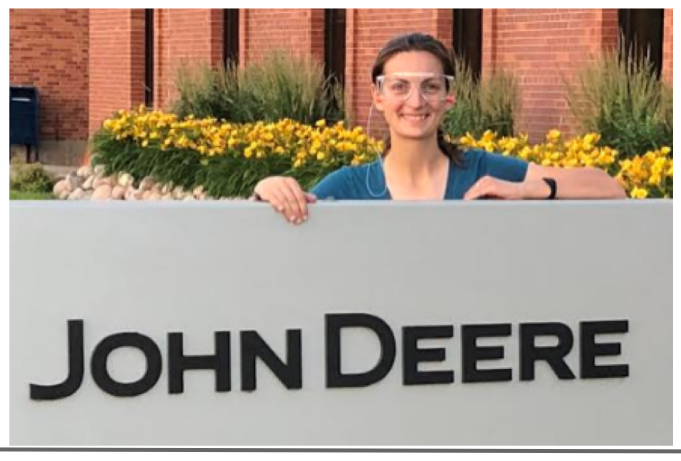
Cafeteria Congestion



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Part I: Overview of Business

- John Deere Ottumwa Works
- John Deere's 1st Manufacturing Factory in Iowa
- Specializes in the production of:
  - Round Balers
  - Large/Small Square Balers
  - Self Propelled Windrowers
  - Mower Conditioners

Part II: Job Specifics

•Work with the safety and layout department to revise pedestrian and vehicle paths throughout the factory

•Measuring path widths, creating Excel charts to display data, prioritizing areas of concern, and developing a plan to meet safety and general manager's requirements

Part III: Introduce the Problem

•Congestion in the Cafeteria

•What is the best layout in the cafeteria to minimize conflicts and maximize efficiency for students at lunch time?

Part IV: Background

- Measuring
- Drafting/Scaling
- Traffic Flow Patterns
- Research of Congestion
- Data Collection

Part V: Business Solution

- Revise Entrances and Exits of traffic to minimize congestion
- New Layout of Cafeteria
  - Round vs Rectangular Tables
- Transition times for lunches
- Make traffic flow patterns
- Have directional aisle ways

Part VI: Student Solutions

- Analyze lunch exchange times
- Change traffic flow into lunch line
- Change traffic flow for lunch exchanges (enter/exit only)
- Balance # of students in each lunch
- Change setup of serving lines